

#### Communicable Disease and Epidemiology News

Published continuously since 1961 Laurie K. Stewart, MS, Editor (laurie.stewart@metrokc.gov) Public Health
Seattle & King County
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HEALTHY PEOPLE. HEALTHY COMMUNITIES. Epidemiology, Prevention Division Wells Fargo Center 999 Third Avenue, Suite 900 Seattle. WA 98104-4039

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# Nationwide Salmonella Enteriditis Outbreak Linked to Raw Almonds

A Salmonella Enteriditis outbreak, linked to raw almonds originating from Paramount Farms, and first identified by the Oregon Department of Human Services State Health Division has led to a voluntary recall of the almonds. The almonds were sold to consumers in a variety of packages and under a variety of brand names. Therefore, the Food and Drug Administration is urging that, before eating any raw almonds bearing a "best before" date of 8/21/04, consumers check with the store where they purchased the almonds to find out if the almonds came from Paramount Farms.

As of May 24<sup>th</sup>, 2004, twenty-four *S*. Enteriditis patient isolates typed by health department laboratories had matching Pulsed Field Gel Electrophoresis (PFGE) patterns. Four of these patients are Washington State residents, and one of these is a King County resident. Patient ages range from 9 months to 91 years, with illness onset dates from June 2003 to April 2004.

The ability to identify this outbreak and identify and recall the implicated food product hinged on molecular testing of salmonella isolated from stool cultures ordered by health care providers and submitted to public health laboratories.

Prompt reporting of salmonella cases by healthcare providers enables Public Health to elicit a food history from the patient when the memory of foods consumed in the incubation period prior to illness onset is fresh. Both health care providers and laboratories are required to report salmonella in Washington State. This requirement is designed to ensure that both laboratory specimens and the relevant demographic, clinical, and epidemiological information necessary for disease investigation and control activities are reported to Public Health. Reporting from both the health care provider and the laboratory are important. For a list of notifiable conditions in Washington State, see:

http://www.metrokc.gov/health/providers/epidemiology/reporting.htm.

Symptoms of salmonellosis include sudden onset of headache, abdominal pain, diarrhea, nausea, and sometimes vomiting. Fever is almost always present. Salmonella can also cause septicemia. To report a case of salmonellosis, please call (206) 296-4774.

#### No Community Transmission of Measles After April 2004 Imported Outbreak in King County

In April 2004, 7 toddlers, recent adoptees from China, were diagnosed with measles in Washington State. Six of these toddlers came to King County, and one to Snohomish County.

Though these cases had multiple community exposures when they were contagious, there have been no reports of secondary cases among other Washington residents. Because 2 incubation periods (42 days) have elapsed since the last documented public exposure, the measles outbreak was declared over on May 18, 2004.

The lack of secondary cases may be a reflection of relatively good MMR coverage rates, the requirement for a 2nd dose of MMR in school-aged children, and more limited transmission of respiratory infections from toddlers. Unfortunately, MMR coverage rates are on the decline in King County and nationally.

# This outbreak serves as a good reminder that, although measles is no longer endemic in the United States, it is still just a plane ride away at any time.

Health care providers are urged to 1) take every opportunity to improve measles vaccine coverage among their patients, and 2) to take a complete travel and exposure history from patients with fever and rash, and consider measles in the differential diagnosis.

#### Zebra of the Month: Tick Paralysis

Special thanks to Amit Singal, MD for this case report.

#### Case Report:

A previously healthy adult male was seen in a King County Emergency Department in early April with a chief complaint of numbness for the past two days. The numbness started on the right posterior side of his head and then gradually spread through his face, down his back, and into his legs. On the day of presentation, he started to feel unsteady due to the numbness in his lower extremities. On exam, the patient was afebrile and his vital signs were otherwise normal. Neurologic exam was only significant for marked ataxia; it was otherwise completely unremarkable including normal cerebellar exam, no pronator drift, and negative Romberg sign. Lab evaluation revealed normal CBC, serum chemistries, urinalysis, and urine toxicology screen.

On more complete physical exam, an engorged tick was found under long hair on the posterior inferior side of his head with a small ring of erythema around the bite site. The tick was removed and identified as *Dermacentor andersoni*. The patient was observed overnight and discharged the next day with significant improvement in numbness and neurologic exam.

The patient had traveled to central Washington the previous weekend, where he most likely acquired the tick.

#### **Editorial Comment:**

Tick paralysis is typically characterized by an acute, ascending, flaccid motor paralysis that can be confused with other syndromes causing paralysis, including Guillain-Barré syndrome, botulism, and myasthenia gravis.

Female ticks of a number of species can release a neuorotoxin after attaching to and feeding on humans (typically at the nape of the neck or hairline). Symptoms usually occur after the tick has fed for several days, and paralysis usually resolves when the tick is removed. If the tick is not removed promptly, however, the paralysis may progress, and the patient may require respiratory support. The mortality rate has been reported to be 10% to 12%.

#### How to Remove a Tick

- Remove ticks as soon as possible after exposure.
- 2. Grasp the head of the tick with thin tipped tweezers and pull straight out without jerking or twisting.
- Gloves should be worn when removing ticks and the bite site should be thoroughly disinfected.

In a 1999 case series, in which 33 human cases of Tick Paralysis that occurred in Washington State between 1946 and 1996 were described<sup>1</sup>, the majority of cases were girls under ten years of age. Cases occurred most commonly between April and June, when nymphs and mature wood ticks are most prevalent. Nearly all cases had probable exposures east of the Cascade Mountains, and when tick species was reported, all were *Dermacentor andersoni*.

Tick paralysis is not currently a notifiable condition, but case reports are still encouraged. Other tick-borne disease that occur in Washington State are Rocky Mountain spotted fever (one to two cases each year), tularemia (two to four cases each year), Lyme disease (15 cases per year), relapsing fever (4 to 8 cases each year), and babesiosis (4 cases ever reported). To report any of these tick-borne diseases, please call (206) 296-4774.

1 Dworkin MS, Shoemaker PC, Anderson, DE. Tick Paralysis: 33 human cases in Washington State, 1946-1996. Clinical Infectious Diseases 1999;29:1435-9.

#### **Treatment of Pertussis with Azithromycin**

Public Health has learned of several pertussis cases and pertussis contacts who had been inappropriately prescribed a 3-day course of azithromycin for treatment or chemoprophylaxis for pertussis.

The American Academy of Pediatrics considers azithromycin (10-12 mg/kg per day, orally, in one dose for 5 days, maximum 600 mg per day) an acceptable alternative to erythromycin estolate for treatment and chemoprophylaxis for pertussis. Azithromycin regimens shorter than 5 days are not recommended for treatment or chemoprophylaxis of pertussis, because adequate and well-controlled trials are not available to demonstrate safety and effectiveness.

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## Online Resources

Public Health Home Page: <a href="www.metrokc.gov/health/">www.metrokc.gov/health/</a> The EPI-LOG: <a href="www.metrokc.gov/health/providers">www.metrokc.gov/health/providers</a> Subscribe to the Public Health Communicable Disease listserv (PHSKC INFO-X) at:

http://mailman.u.washington.edu/mailman/listinfo/phskc-info-

Reported Cases of Selected Diseases	s, Seattle &	King Cou	nty 2004		
•	Cases Reported in April		Cases Reported Through April		
	2004	2003	2004	2003	
Campylobacteriosis	21	16	69	64	
Cryptosporidiosis	4	3	10	12	
Chlamydial infections	277	456	1587	1594	
Enterohemorrhagic <i>E. coli</i> (non-O157)	0	0	0	0	
E. coli O157: H7	3	1	3	10	
Giardiasis	7	6	42	34	
Gonorrhea	63	127	377	486	
Haemophilus influenzae (cases <6 years of age)	1	0	2	0	
Hepatitis A	1	3	3	11	
Hepatitis B (acute)	0	7	12	14	
Hepatitis B (chronic)	42	48	210	201	
Hepatitis C (acute)	2	3	4	5	
Hepatitis C (chronic, confirmed/probable)	113	72	433	359	
Hepatitis C (chronic, possible)	42	15	134	91	
Herpes, genital (primary)	31	55	208	220	
HIV and AIDS (includes only AIDS cases not previously reported as HIV)	33	17	155	132	
Measles	6	0	6	0	
Meningococcal Disease	2	1	8	3	
Mumps	0	0	0	0	
Pertussis	11	20	82	68	
Rubella	0	0	0	0	
Rubella, congenital	0	0	0	0	
Salmonellosis	25	13	61	66	
Shigellosis	4	15	27	50	
Syphilis	10	8	29	28	
Syphilis, congenital	0	0	0	0	
Syphilis, late	3	2	25	16	
Tuberculosis	15	17	42	53	